

In the Claims:

1        1. [Currently Amended] A printing system comprising the following:  
2              firmware associated with the printing system;  
3              a communications device adapted and constructed to facilitate  
4 communication between the printing system and a remote source of information;  
5 and  
6              an automatic remote firmware update mechanism adapted to selectively  
7 and automatically retrieve firmware upgrade information from the remote source  
8 of information via the communications device, and to selectively and  
9 automatically install the firmware upgrade information into the firmware of the  
10 printing system; and  
11              wherein the firmware upgrade information comprises information  
12              configured to effect at least one operation of a printer of the printing system  
13              with respect to the formation of a hard image upon media using the printer.

1        2. [Previously Presented] A printing system according to claim 1,  
2 wherein the automatic remote firmware update mechanism comprises a part of  
3 firmware installed in the imaging printing system.

1        3. [Previously Presented] A printing system according to claim 1,  
2 wherein the communications device is selected from a group consisting of a  
3 modem and a network interface card.

1        4. [Previously Presented] A printing system according to claim 3,  
2 wherein the communication device further comprises means for connecting to,  
3 and accessing information from, a web site.

1        5. [Currently Amended] A printing system according to claim 1,

2 further comprising the following:

3              flag means for storing a value corresponding to an update trigger  
4 parameter;  
5 ~~flag parameter update means for incrementally increasing the update trigger~~  
6 ~~parameter in response to a sensed condition;~~ and

7       flag parameter update means for incrementally increasing the update  
8       trigger parameter in response to a sensed condition; and  
9       trigger means for actuating the automatic remote firmware update mechanism to  
10      automatically retrieve firmware upgrade information when the update trigger  
11      parameter reaches a predetermined update value  
12       trigger means for actuating the automatic remote firmware update  
13      mechanism to automatically retrieve firmware upgrade information when the  
14      update trigger parameter reaches a predetermined update value.

1       6.     [Previously Presented] A printing system according to claim 5,  
2       wherein the flag parameter update means incrementally increases the update  
3       trigger parameter value in response to page count through the imaging system.

1       7.     [Previously Presented] A printing system according to claim 5,  
2       wherein the flag parameter update means incrementally increases the update  
3       trigger parameter value in response to the passage of a predetermined amount of  
4       time.

1       8.     [Previously Presented] A printing system according to claim 5,  
2       further comprising means for periodically checking the update trigger parameter.

1       9.     [Previously Presented] A printing system according to claim 1,  
2       further comprising means for comparing downloaded firmware upgrade  
3       information to existing firmware to determine the necessity of installing the  
4       downloaded firmware upgrade information.

1       10.    [Previously Presented] A printing system according to claim 1,  
2       further comprising means for notifying a system user when firmware is to be  
3       upgraded.

1        11. [Currently Amended] In a printing system including firmware and a  
2 communications device adapted and constructed to facilitate communication  
3 between the imaging device and a remote source of information, a method of  
4 updating firmware comprising the following:

5            selectively and automatically retrieving firmware upgrade information from  
6 the remote source of information via the communications device; and

7            selectively installing the firmware upgrade information into the firmware  
8 of a printer of the printing system.

1        12. [Previously Presented] A method according to claim 11, wherein  
2 retrieving firmware upgrade information comprises retrieving firmware upgrade  
3 information from a web site.  
  
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1        13. [Currently Amended] A method according to claim 11, further  
2 comprising the following:

3 ~~storing a value corresponding to an update trigger parameter;~~  
4 ~~sensing a condition;~~  
5 ~~incrementally increasing the update trigger parameter in response to the sensed~~  
6 ~~condition; and~~  
7 ~~actuating the automatic remote firmware update mechanism to automatically~~  
8 ~~retrieve firmware upgrade information when the update trigger parameter~~  
9 ~~reaches a predetermined update value~~

10        storing a value corresponding to an update trigger parameter;  
11        sensing a condition;

12        incrementally increasing the update trigger parameter in response to the  
13 sensed condition; and

14        actuating the automatic remote firmware update mechanism to  
15 automatically retrieve firmware upgrade information when the update trigger  
16 parameter reaches a predetermined update value.

1           14. [Previously Presented] A method according to claim 13, wherein  
2 sensing a condition comprises sensing page count through the imaging printing  
3 system, and the step of incrementally increasing the update trigger parameter  
4 comprises incrementally increasing the update trigger parameter value in  
5 response to page count through the imaging system.

1           15. [Previously Presented] A method according to claim 13, wherein  
2 sensing a condition comprises sensing the passage of time, and the step of  
3 incrementally increasing the update trigger parameter comprises incrementally  
4 increasing the update trigger parameter value in response to the passage of a  
5 predetermined amount of time.

1           16. [Previously Presented] A method according to claim 13, further  
2 comprising periodically checking the update trigger parameter.

1           17. [Previously Presented] A method according to claim 11, further  
2 comprising comparing downloaded firmware upgrade information to existing  
3 firmware to determine the necessity of installing the downloaded firmware  
4 upgrade information.

1           18. [Previously Presented] A method according to claim 11, further  
2 comprising notifying a system user when firmware has been upgraded.

1           19. [Currently Amended] A printer comprising the following:  
2           firmware installed in the printer;  
3           a telecommunications communications device adapted and constructed to  
4 facilitate communication between the printer and a web-site remote device  
5 containing firmware upgrade information; and  
6           an automatic remote firmware update mechanism adapted to selectively  
7 and automatically retrieve firmware upgrade information from the web-site  
8 remote device via the telecommunications communications device, and to  
9 selectively and automatically install the firmware upgrade information into the  
10 firmware of the printer.

1           20. [Currently Amended] A printer according to claim 19, wherein the  
2 automatic remote firmware update mechanism is adapted to selectively and  
3 automatically download firmware update image files from the web site remote  
4 device.

1           21. [New] A printer according to claim 19, further comprising:  
2           a print engine configured to print hard images upon media; and  
3           a housing configured to at least partially house the firmware, the print  
4 engine and the automatic firmware update mechanism.

1           22. [New] An apparatus comprising:  
2           a printer configured to form hard images upon sheets of media;  
3           wherein the printer comprises:  
4                 initial firmware provided at a first moment in time, and wherein the  
5 initial firmware is accessed to implement operations of the printer with respect  
6 to the formation of hard images upon the sheets of media using the printer;  
7                 a communications device adapted to communicate with a source  
8 located externally of the printer; and  
9                 circuitry coupled with the communications device and configured  
10 to automatically access additional firmware from the source at a second moment  
11 in time after the first moment in time using the communications device and to  
12 render the additional firmware accessible within the printer to implement  
13 operations of the printer with respect to the formation of hard images upon the  
14 sheets of media using the printer.

1           23. [New] The apparatus of claim 22 wherein the additional firmware  
2 updates the initial firmware.

1           24. [New] The apparatus of claim 22 wherein the additional firmware  
2 replaces at least a portion of the initial firmware.

1           25. [New] The apparatus of claim 22 wherein the additional firmware  
2 comprises firmware in addition to the initial firmware.

1           26. [New] The apparatus of claim 22 wherein the second moment in  
2 time is after deployment of the printer by a user.

1           27. [New] The apparatus of claim 22 wherein the circuitry is  
2 configured to render the additional firmware accessible without user input.

1           28. [New] The apparatus of claim 22 wherein the circuitry comprises  
2 an automatic remote firmware update mechanism.

1           29. [New] The apparatus of claim 22 wherein the printer further  
2 comprises:

3           a print engine configured to form the hard images upon the sheets of  
4 media; and

5           a housing configured to at least partially house the initial firmware, the  
6 additional firmware, the communications device, the circuitry and the print  
7 engine.

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